Amendments to the Specification:

Please replace the paragraph beginning on page 39, line 25, with the following rewritten paragraph:

When the (R-G) data corresponding to a 5X5 pixel area block are as presented in FIG. 13, the interpolation calculation and the low pass filtering processing calculation described above are performed as expressed in the following formula (6).

Interp R-G(i, j)=

~~[{R-G(i-2, j-2) + (R-G(i+2, j-2) + R-G(i-2, j+2) + R-G(i+2, j+2)} X kc1~~

~~+ {R-G(i-2, j-2) + (R-G(i+2, j-2) + R-G(i-1, j+2) + R-G(i+1, j+2)} X kc2~~

~~+ {R-G(i, j-2) + R-G(i, j+2)} X kc3~~

~~+ {R-G(i-2, j-1) + (R-G(i+2, j-1) + R-G(i-2, j+1) + R-G(i+2, j+1)} X kc4~~

~~+ {R-G(i-1, j-1) + (R-G(i+1, j-1) + R-G(i-1, j+1) + R-G(i+1, j+1)} X kc5~~

~~+ {R-G(i, j-1) + (R-G(i, j+1) X kc6~~

~~+ {R-G(i-2, j) + R-G(i+2, j)} X kc7~~

~~+ {R-G(i-1, j) + (R-G(i+1, j) X kc8~~

~~+ {R-G(i, j) X kc9] / (2^Ktr-g)~~   ~~(6)~~

$$[\{R\text{-}G(i\text{-}2, j\text{-}2) + R\text{-}G(i\text{+}2, j\text{-}2) + R\text{-}G(i\text{-}2, j\text{+}2) + R\text{-}G(i\text{+}2, j\text{+}2)\} \times kc1$$

$$+ \{R\text{-}G(i\text{-}2, j\text{-}2) + R\text{-}G(i\text{+}2, j\text{-}2) + R\text{-}G(i\text{-}1, j\text{+}2) + R\text{-}G(i\text{+}1, j\text{+}2)\} \times kc2$$

$$+ \{R\text{-}G(i, j\text{-}2) + R\text{-}G(i, j\text{+}2)\} \times kc3$$

$$+ \{R\text{-}G(i\text{-}2, j\text{-}1) + R\text{-}G(i\text{+}2, j\text{-}1) + R\text{-}G(i\text{-}2, j\text{+}1) + R\text{-}G(i\text{+}2, j\text{+}1)\} \times kc4$$

$$+ \{R\text{-}G(i\text{-}1, j\text{-}1) + R\text{-}G(i\text{+}1, j\text{-}1) + R\text{-}G(i\text{-}1, j\text{+}1) + R\text{-}G(i\text{+}1, j\text{+}1)\} \times kc5$$

$$+ \{R\text{-}G(i, j\text{-}1) + R\text{-}G(i, j\text{+}1)\} \times kc6$$

$$+ \{R\text{-}G(i\text{-}2, j) + R\text{-}G(i\text{+}2, j)\} \times kc7$$

$$+ \{R\text{-}G(i\text{-}1, j) + R\text{-}G(i\text{+}1, j)\} \times kc8$$

$$+ \{R\text{-}G(i, j) \times kc9\}] / (2\text{^}Ktr\text{-}g) \qquad (6)$$

Here kc1 - kc9, and Ktr-g each represents a coefficient.